

Notice of Allowability

Application No.

09/882,190

Applicant(s)

BRADLEY, WAYNE H.

Examiner

Jason M. Perilla

Art Unit

2638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed July 11, 2005.
2. ☒ The allowed claim(s) is/are 1-18.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>20050927</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

EXAMINER'S AMENDMENT

1. Claims 1-18 are pending in the instant application.
2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Peter Albert on September 27, 2005.

The application has been amended as follows wherein the following versions of claims 1 and 10 replace all prior versions in their entirety:

1. A code-divisional access (CDMA) receiver for de-scrambling and de-spreading a received signal that was scrambled by a complex scrambling code into a first integrator input and a second integrator input, the received signal having in-phase and quadrature components, wherein the first integrator input and the second integrator input estimate a first and second communication signals that were scrambled by first and second scrambling codes, respectively, the CDMA receiver comprising:

 a summer for producing a sum signal by adding the in-phase and quadrature components of the received signal;

 a subtractor for producing a difference signal by computing the difference between the in-phase component and the quadrature components of the received signal;

 a selector for selecting one of the sum and difference signals to be an imaginary component based on the complex scrambling code and for selecting the other one of the sum and difference signals ~~not selected to be the imaginary component~~ to be a real component;

 a first selectable negation circuit for producing a the first integrator input by selectively negating the real and imaginary components based on the complex scrambling code and the first scrambling code; and

a second selectable negation circuit for producing a the second integrator input by selectively negating the real and imaginary components based on the complex scrambling code and the second scrambling code.

10. A method of de-spreading a received signal that was scrambled by a complex scrambling code into de-scrambled first and second communication signals, the received signal having in-phase and quadrature components, wherein the de-scrambled first and second communication signals were spread by first and second spreading scrambling codes, respectively, the method comprising:

producing a sum signal by adding the in-phase and quadrature components of the received signal;

producing a difference signal by computing the difference between the in-phase component and the quadrature component of the received signal;

selecting one of the sum and difference signals to be an imaginary component based on the complex scrambling code;

selecting the other one of the sum and difference signals ~~not-selected-to-be the imaginary component~~ to be a real component;

producing a first integrator input by selectively negating the real and imaginary components based on the complex scrambling code and the first scrambling code; and

producing a second integrator input by selectively negating the real and imaginary components based on the complex scrambling code and the second scrambling code.


Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Perilla whose telephone number is (571) 272-3055. The examiner can normally be reached on M-F 8-5 EST.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jason M. Perilla
September 27, 2005

jmp


CHIEH M. FAN
PRIMARY EXAMINER